

## AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Currently Amended) A seismic cable, comprising:  
a tension support cable capable of absorbing tension during deployment of the seismic cable;  
a signal cable attached to a plurality of first points spaced along the length of the support cable at a plurality of second points spaced along the length of the signal cable to mechanically decouple the signal cable from the tension support cable; and  
at least one sensor module disposed on the signal cable proximate at least one third point, said at least one third point being different than the plurality of second points.
2. (Original) The seismic cable of claim 1, further comprising a first sheath enclosing the support cable and the signal cable.
3. (Original) The seismic cable of claim 2, wherein the first sheath comprises at least one of is a skin, a jacket or an extrusion matrix.
4. (Original) The seismic cable of claim 1, wherein the support cable includes a plurality of strengthening members.
5. (Original) The seismic cable of claim 4, wherein the strengthening members are cabled by a second sheath.
6. (Original) The seismic cable of claim 1, wherein the support cable includes at least one of a signal lead and a power lead.

7. (Original) The seismic cable of claim 6, further comprising an electronics module powered over the power lead and capable of transmitting data over the signal lead.
8. (Original) The seismic cable of claim 7, wherein the support cable is sectioned.
9. (Original) The seismic cable of claim 1, wherein the signal cable includes a plurality of leads cabled by a third sheath.
10. (Original) The seismic cable of claim 1, wherein the signal cable includes at least one strengthening member.
11. (Original) The seismic cable of claim 1, further comprising a plurality of sensor modules electrically connected to the signal cable.
12. (Original) The seismic cable of claim 1, wherein the sensor modules transmit data and receive power over the signal cable.
13. (Currently Amended) The seismic cable of claim 1, further comprising:
  - a plurality of sensor modules electrically connected to and distributed along the signal cable; and
  - a plurality of electronics modules by which the signal cable is attached to the support cable at the second points.
14. (Currently Amended) The seismic cable of claim 13 [[1]], wherein the electronics modules are electrically connected to the signal cable at the plurality of second points and mechanically connected to the support cable.

15. (Original) The seismic cable of claim 1, wherein the signal cable is attached to the support cable by a zipper mechanism.
16. (Currently Amended) The seismic cable of claim 1, wherein the plurality of second points are spaced along the length of the signal cable in proportion to a length of the sensor module.
17. (Currently Amended) The seismic cable of claim 16, wherein the plurality of second points are positioned between adjacent sensor modules.
18. (Original) The seismic cable of claim 16, wherein the separations are created by pulling a rip cord fabricated in the seismic cable to detach the signal cable from the support cable.
19. (Currently Amended) The seismic cable of claim 1, further comprising a plurality of arms mechanically affixed to the support cable and rotationally connected to the signal cable to attach the signal cable to the support cable at the plurality of second points.
20. (Original) The seismic cable of claim 19, wherein the arms are at least one of rigid and semi-rigid arms.
21. (Original) The seismic cable of claim 19, wherein the arms are mechanically fixed by a plurality of clamps.
22. (Original) The seismic cable of claim 19, wherein the arms are rotationally connected by a bearing.
23. (Original) The seismic cable of claim 19, further comprising a plurality of stops restraining movement of the rotational connection along the length of the signal cable.

24. (Original) The seismic cable of claim 1, further comprising a plurality of sensor modules electrically connected to and distributed along the signal cable and by which the support cable and the signal cable are joined.

25. (Original) The seismic cable of 24, wherein the support cable passes through a groove in the sensor modules.

26. (Original) The seismic cable of claim 1, wherein each of the sensor modules comprises a housing defining a groove therethrough through which the support cable runs.

27. (Original) The seismic cable of claim 26, wherein the support cable is acoustically decoupled from the housing by a plurality of elastic devices.

28. (Original) The seismic cable of claim 26, wherein the support cable is acoustically decoupled from the housing by freely moving through the groove relative to the sensor module.

29. (Currently Amended) A method for assembling a seismic cable, comprising attaching a a plurality of first points spaced along the length of a tension support cable capable of absorbing tension during deployment of the seismic cable to a signal cable at a plurality of second points spaced along the length of the signal cable, the plurality of first points differing from at least one third point of attachment for at least one sensor module, to mechanically decouple the signal cable from the tension support cable thereof.

30. (Original) The method of claim 29, wherein attaching the support cable to the signal cable includes mechanically connecting an electronics module to the support cable and electrically connecting the electronics module to the signal cable.

31. (Currently Amended) The method of claim 29, wherein attaching the support cable to the signal cable includes zipping the signal cable to the support cable at the first and second points.

32. (Currently Amended) The method of claim 29, wherein attaching the support cable to the signal cable includes separating the support cable and the signal cable between the second points.

33. (Original) The method of claim 32, wherein separating the support cable and the signal cable includes pulling a rip-cord.

34. (Currently Amended) The method of claim 29, wherein attaching the support cable to the sensor includes mechanically affixing at least one of a rigid and a semi-rigid arm to the support cable and rotationally connecting the respective rigid or semi-rigid arm to the signal cable at each of the second points.

35. (Original) The method of claim 29, wherein attaching the support cable to the signal cable includes connecting the support cable to the signal cable by a plurality of sensor modules.